

Docket No.: CL-10191
Application No.: 10/767,066
Amendment Date: August 4, 2006
Reply of Office Action of: May 4, 2006

AMENDMENTS TO THE CLAIMS

Please cancel claims 11 and 13-21, and amend claims 1 and 10 as indicated among the following complete set of pending claims:

Claim 1. (Currently amended) A flat fluorescent lamp, comprising:

a back substrate;

a front substrate made of a transparent material and mounted on the back substrate through a sealing member disposed therebetween, to be spaced from the back substrate by a predetermined interval;

a plurality of partitions alternately disposed between the back substrate and the front substrate, to define a discharge channel of a zigzag shape therebetween, the partitions being in close contact with the front substrate;

a fluorescent material layer coated along a surface of the discharge channel defined by the partitions;

first electrodes disposed in spaced apart relation and extending substantially completely along both sides of an outer surface of the front substrate;

second electrodes disposed in spaced apart relation and extending substantially completely along both sides of an outer surface of the back substrate and facing the first electrodes; and

a reflective layer formed of a combination of a white ceramic material and a glass material to cover the entire back substrate and an upper portion of the electrode of the back substrate;

wherein the apertures of the electrodes are formed to have sizes decreasing gradually from an inner side of each electrode to an outer side thereof.

Claim 2. (Original) The flat fluorescent lamp as defined in claim 1, wherein the partitions are integrally formed with the back substrate.

Docket No.: CL-10191
Application No.: 10/767,066
Amendment Date: August 4, 2006
Reply of Office Action of: May 4, 2006

Claim 3. (Original) The flat fluorescent lamp as defined in claim 1, wherein the partitions are made of the same transparent material as the front substrate, and are integrately formed with the front substrate.

Claim 4. (Original) The flat fluorescent lamp as defined in claim 1, wherein the partitions comprise first partitions integrately formed with the back substrate, and second partitions integrately formed with the front substrate.

Claim 5. (Canceled)

Claim 6. (Canceled)

Claim 7. (Original) The flat fluorescent lamp as defined in claim 1, further comprising a plurality of floating electrodes disposed between the electrodes of the back substrate.

Claim 8. (Previously presented) The flat fluorescent lamp as defined in claim 1, further comprising a plurality of floating electrodes disposed between the second electrodes of the back substrate.

Claim 9. (Previously presented) The flat fluorescent lamp as defined in claim 1, wherein the electrodes of the back substrate have a plurality of apertures, and the apertures are formed in stripe-, circle-, polygon-, or mesh-shapes.

Docket No.: CL-10191
Application No.: 10/767,066
Amendment Date: August 4, 2006
Reply of Office Action of: May 4, 2006

Claim 10. (Currently amended) A flat fluorescent lamp, comprising:

a back substrate;

a front substrate made of a transparent material and mounted on the back substrate through a sealing member disposed therebetween, to be spaced from the back substrate by a predetermined interval;

a plurality of partitions alternately disposed between the back substrate and the front substrate, to define a discharge channel of a zigzag shape therebetween, the partitions being in close contact with the front substrate;

a fluorescent material layer coated along a surface of the discharge channel defined by the partitions;

first electrodes disposed in spaced apart relation and extending substantially completely along both sides of an outer surface of the front substrate;

second electrodes disposed in spaced apart relation and extending substantially completely along both sides of an outer surface of the back substrate and facing the first electrodes; and

a reflective layer formed of a combination of a white ceramic material and a glass material to cover the entire back substrate and an upper portion of the electrode of the back substrate;

wherein the electrodes of the back substrate have a plurality of apertures, and the apertures are formed in stripe-, circle-, polygon-, or mesh-shapes; and

[[The flat fluorescent lamp as defined in claim 9,]]wherein the apertures of the electrodes are formed to have sizes decreasing gradually from an inner side of each electrode to an outer side thereof.

Claim 11. (Canceled)

Claim 12. (Previously presented) The flat fluorescent lamp as defined in claim 1, wherein the reflective layer comprises a white ceramic material including Al₂O₃, TiO₂, and WO₃, and is coated at a thickness not less than 20 μm.

Docket No.: CL-10191

Application No.: 10/767,066

Amendment Date: August 4, 2006

Reply of Office Action of: May 4, 2006

Claims 13-21. (Canceled)